

GENERAL DESCRIPTION

WHAT IS A DATAPORT?

The CRU DataPort Removable Storage Module allows you to easily remove a 3.5" hard drive from your PC, MAC, workstation or disk array sub-system. It is also the perfect solution for protecting your valuable data. The DataPort carrier provides a simple and inexpensive way to transport data between computers, and is also useful for on-line back-up and storage of critical files. Sensitive information can be easily removed and secured. The DataPort was designed for use in hot-swap environments, thus making it ideal for RAID applications.

The DataPort consists of a frame, carrier and/or top and bottom covers. The frame can be fitted into any standard 5.25" half-height drive bay. The DataPort offers keylock or latch version, as well as IDE and SCSI interfaces.

DATAPORT STRUCTURE INFORMATION

		DataPort™ Removable Storage Modules						
	DP-I	DP-IV	DP-V	DP-V Plus	DP-VI	DP-VII	DP-VIII	
Supported Interfaces								
40-Pin ATA/IDE	✓	✓	✓	✓		✓		
40-Pin Ultra ATA 66/100	✓	✓	✓	✓				
50-Pin SCSI Narrow	✓		✓	✓	✓	✓		
68-Pin SCSI Wide & Wide Ultra, Ultra 160			✓	✓	✓	✓	✓	
80-Pin SCSI Ultra Wide/ LVD SCA & Ultra 160					✓			
Sizes/Speeds Supported								
5.25" Half Height	✓	✓	✓	✓	✓	✓	✓	
5.25" Full Height								
RPM Speed Supported	5400	5400	7200	7200+	7200+	7200+	7200+	
Features								
SCSI ID Selector			✓	✓	✓	✓	✓	
7-Segment SCSI ID Display					✓	✓	✓	
TCCS(tm) Fan Failure Alarm				✓	✓	✓	✓	
LVD			✓	✓	✓	✓	✓	
Available in Black			✓	✓	✓		✓	
Construction								
Carrier Material	Plastic	Metal top and bottom cover	Metal top and bottom cover	Aluminum	Aluminum	Aluminum	Aluminum	
Frame Material	Aluminum	Plastic	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	
Dual Ball Bearing Cooling Fans		✓	✓	✓	✓	✓	2 Fans	
Reliability								
10 Year Warranty	✓	✓	✓	✓	✓	✓	✓	
25K Connector Insertion rating	✓	✓	✓	✓	✓	✓	✓	

PACKAGE CONTENTS

The CRU DataPort kit includes all of the necessary hardware to install a 3.5" hard drive in a 5.25" drive bay. Before installing, verify that the following items have been included in the package.

DATAPORT I

Quantity	Description
1	DataPort I frame assembly
1	DataPort I HDD carrier assembly
1	Metal screen kit with 6 pcs of 2-56 screws
4	6-32 x 3/8" phillips pan head screws for hard drive mounting
4	6-32 x 1/4" flat head screws for AT rails or frame mounting
2	Plastic AT rails
2	Key for keylock version

DATAPORT IV

Quantity	Description
1	DataPort IV frame assembly
1	DataPort IV carrier assembly
2	Metal covers
4	6-32 x 3/8" flat head screws for hard drive mounting
4	M3 x 10mm phillips flat-head screws for frame mounting
1	SCSI ID selector switch cable (SCSI version)
1	HDD activity LED cable (SCSI version)
2	Key for keylock version

DATAPORT V, V "PLUS" AND VI

Quantity	Description
1	DataPort V (VI) frame assembly
1	DataPort V (VI) carrier assembly
2	Metal covers
4	6-32 x 3/8" flat head screws for hard drive mounting
4	M3 x 10mm phillips pan head screws for frame mounting
1	SCSI ID selector switch cable (SCSI version)
1	HDD activity LED cable (SCSI version)
2	Key for keylock version

DATAPORT VII

Quantity	Description
1	DataPort VII frame assembly
1	DataPort VII carrier assembly
2	Metal covers
4	6-32 x 3/8" flat head screws for hard drive mounting
4	M3 x 10mm phillips pan head screws for frame mounting
1	SCSI ID selector switch cable (SCSI version)
1	HDD activity LED cable
2	Key for keylock version

DATAPORT VIII

Quantity	Description
1	DataPort VIII frame assembly
1	DataPort VIII carrier assembly
2	Metal covers
4	6-32 x 3/8" flat head screws for hard drive mounting
4	M3 x 3/8" phillips pan head screws for frame mounting
2	Key for keylock version
1	Adhesive strip for attaching the thermocouple

If any of the above items are missing, or you need special parts, contact your dealer or CRU for instructions regarding replacement or service. You can order additional DataPort carriers or frames for multiple drive applications.



CRU DataPort I



CRU DataPort VI



CRU DataPort IV



CRU DataPort VII



CRU DataPort V



CRU DataPort VIII

PREPARATION FOR INSTALLATION

Note: To prevent data loss, read this manual thoroughly before installing or operating the DataPort.

Before touching any electrical equipment, ground yourself by touching the metal part of your computer chassis. This discharges static electricity and prevents any damage to your computer.

CRU is not responsible for static discharge damages.

TOOLS REQUIRED :

Phillips screwdriver.

Small flat screwdriver.

Other items that will be needed are:

- Computer Users Manual.
- Internal SCSI data cable.
- HDD manual to set the SCSI ID for a SCSI HDD.
- HDD manual to set slave/master jumper or internal IDE data cable.
- SCSI bus terminator. CRU SCSI DataPorts do not have SCSI terminator built-in and do not provide termination power. Contact your SCSI HDD and/or SCSI controller manufacturers for more information.
- SCSI controller.

FRAME INSTALLATION

1. Turn off the computer and disconnect the power cord from the electrical outlet.

Before working on your computer, wait one minute for any residual energy to dissipate.

2. Remove the cover of the computer.

3. Locate a 5.25" drive bay with external access.

Identify the 5.25" half-height bay in which you plan to mount the DataPort frame assembly. Study the bay to determine the location of mounting holes or whether mounting rails are necessary. Remove any filler plates that may be present.

4. Install mounting rails.

If the drive bay requires mounting rails, install one on each side of the frame. The mounting rails should be provided with your computer system. The CRU DataPort I includes two standard AT Rails.

5. Mounting the frame assembly.

Insert the frame assembly into the 5.25" bay. Secure the frame assembly with the screws provided. Side mount holes are available on all models. Bottom mount holes are available on all DP models except the DP-IV and DPVIII. DataPort IV bottom mounting is available as an option.

6. Connect the DC power cable to the frame.

Locate an available 4-pin DC power cable from the computer power supply, plug it into the receptacle on the frame.

7. Connect the data cable to the frame.

Three different types of interfaces are supported by the DataPort; IDE, narrow "Ultra" SCSI and wide SCSI. Locate the data cable, connect it to the I/O connector on the frame. Ensure that pin-1 of the I/O connector (printed on the circuit board) matches pin-1 on the cable (identified by the red dots).

8. If you are installing a SCSI model, and want to use the external SCSI ID selector switch, refer to page 7 for more detail.

The frame installation is now completed, follow the instructions below for carrier installation.

HARD DRIVE INSTALLATION (DP-I THRU DPVII)

1. Remove the carrier top and bottom covers.

The metal covers for DataPort IV, V, V Plus, VI and VII are snapped into place on the carrier without any screws. The supplied cover removal tool or a small flat head screwdriver is handy for this task.

2. Set Master/Slave jumper on drive before placing drive in carrier.

Remove covers using the supplied cover removal tool.

3. Connect the DC power cable to the drive.

Plug the 4-pin DC power cable into the power connector on the drive and ensure it is fully seated. (The 80-pin SCA (Single Connector Attachment) hard drive plugs directly into the female SCA connector on the carrier board without any cables.)

4. Connect the data cable to the drive.

Connect the data cable that matches your particular drive (40-pin for an IDE drive, 50-pin for a narrow SCSI drive and 68-pin for a wide SCSI drive). Ensure the pin-1 on the data cable matches the pin-1 on the drive I/O connector head. SCA drives do not require a cable.

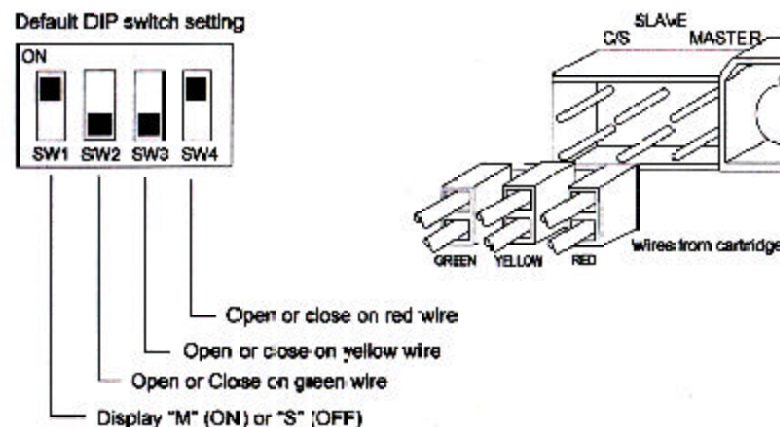


Figure 1 DataPort VII IDE DIP switch setting.

5. Connect SCSI ID cable to HDD as per manual.

If you are installing a SCSI drive and would like to use the SCSI ID selector switch, refer to page 7.

6. If you have a DataPort VII IDE and would like to use the Master/Slave DIP switch, follow the instructions below.

The DIP switch on the back of the DataPort VII IDE carrier allows users to change the LED display on the frame and the Master/Slave settings of the drive from the back of the carrier. Figure 1 shows a sample connection for a drive in master mode.

7. Install the drive in the carrier.

Place the drive in the carrier, using the four screws provided to mount the drive. Position the cables inside the carrier assembly so that they are completely enclosed within the carrier.

8. Tape the Temperature Control Cooling Sensor (TCCS) to the top of the hard drive. Replace the carrier top and bottom covers.

After all of the cable connections have been checked, snap on the top and bottom covers. For DataPort I model, secure the metal screen with the screws provided.

9. Insert the carrier into the frame assembly.

Ensure that the keylock or latch of the DataPort is in the “open” (vertical) position. Position the carrier on the guide rails, then slide the carrier into the frame. Using thumb pressure, fully seat the carrier in the frame, then “lock” the unit with the keylock or the latch.

10. Replace the computer cover.

Carefully recheck the installation procedure above to ensure that everything is in order. Replace the cover on the computer by reversing the sequence of steps that you used to remove it. Insert key or turn latch to power up.

You have finished the installation and your DataPort is ready to operate. Refer to “Operation” on page 11 for instructions.

CARRIER INSTALLATION (DP-VIII)

Follow the steps below to install the HDD into a DataPort VIII carrier. To ensure trouble free installation, refer to the HDD manufacturer’s documentation for proper HDD configuration (SCSI termination for a SCSI HDD) before installation. Remove the carrier from the frame prior to installing the HDD into the carrier.

1. Remove the top and bottom covers.

The metal covers snap into place on the carrier without screws. Slide the covers off the carrier.

2. Connect the DC power and data cable to the HDD.

Plug the 4-pin DC power cable into the power connector on the HDD and make sure that it is fully seated.

Connect the 68-pin Wide SCSI data cable to the HDD. Make sure that the pin-1 on the data cable matches the pin-1 on the HDD and that it is fully seated. SCA drives do not require a cable.

3. Connect the SCSI ID (BCD) cable to the SCSI ID jumper block on the HDD.

The user can select the HDD’s SCSI ID (identification number) with the push buttons located on the front bezel of the DataPort VIII carrier. The 6 wire BCD cable from the carrier board must be connected to the SCSI ID jumper block on the HDD for this task. Refer to the HDD manual to locate the SCSI ID jumper block. It is usually an eight-pin dual-row header located on the back of the device. Refer to the figure on page 8 for typical BCD and activity LED cable connections to the auxiliary jumper block on a Seagate Wide SCSI HDD.

4. Tape the Temperature Control Cooling Sensor (TCCS) to the top of the hard drive.

Use the provided adhesive strip to attach the blue colored temperature sensor to the top of the HDD case.

5. Secure the HDD in the carrier.

Place the HDD in the carrier and use the four screws provided to mount the HDD. Position the cables inside the carrier assembly so that they are completely enclosed within the carrier.

6. Replace the top and bottom covers.

After all of the carrier cable connections have been connected, replace the top and bottom covers.

7. Insert the carrier into the frame assembly.

Ensure that the keylock of the DataPort is in the “open” (vertical) position. Position the carrier on the guide rails, then slide the carrier into the frame. Using thumb pressure, fully seat the carrier in the frame, then “lock” the unit with the keylock.

Note: The keylock on the DataPort also serves as the ON/OFF power switch for the HDD. To lock the DataPort insert the key horizontally. Turn the keylock 90 degrees clockwise to the “ON” position before turning on the computer.

You have now finished the installation and your DataPort is ready to operate. Refer to “Operation” on page 13 for instructions.

CONNECTING THE SCSI ID SELECTOR SWITCH

SCSI CARRIER SETUP

NOTE: *You can ignore the SCSI ID selector switch and set the SCSI ID number with the HDD jumpers. Refer to the document with the drive for details. This switch also sets the LED display on the DPVI.

The CRU DataPort IV, V, VI and VII SCSI carriers have a SCSI ID selector dial switch which allows you to externally set the drive SCSI ID number. The selector switch is connected to the SCSI ID jumper header on the drive by a BCD cable. Refer to the following steps to connect the BCD cable to the SCSI drive.

1. Locate the SCSI ID jumper header on the device.

Refer to the documentation for the drive to locate the SCSI ID header or jumper block. It is a dual-row pin header usually located either on the back or the component side of the device.

2. Remove the jumpers (black shunts).

The jumpers or black shunts on the SCSI ID jumper block or header must be removed to connect the BCD cable. Be careful not to remove any jumper other than those for the SCSI ID selection. Consult your hard drive manual for more details.

3. For 50-pin Narrow SCSI drives, follow the instructions below.

Refer to Figure 2 for connecting the BCD cable to a 50-pin narrow SCSI device. If you could not get the SCSI ID selector switch to work correctly, try reversing the polarity of signal and ground pins.

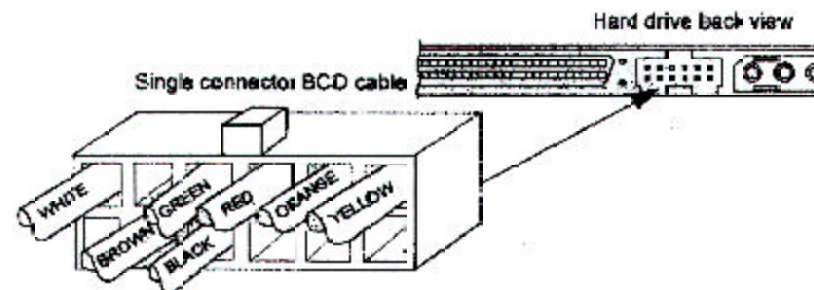
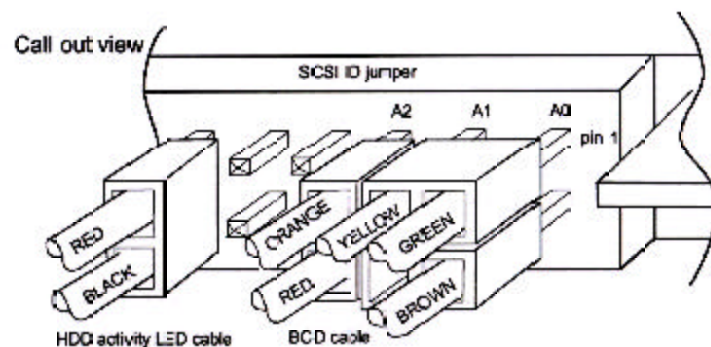


Figure 3 Single BCD cable connection for wide SCSI drives.

4. Connecting the single connector BCD cable to the 68-pin Wide SCSI hard drive.

The single connector BCD cable plugs into the header between the power and SCSI I/O connector on the back of the drive.

Figure 2 BCD cable connection for narrow SCSI drives.



SCSI FRAME SETUP

CRU DataPort I SCSI FRAME

The CRU DataPort I SCSI frame assembly has a SCSI ID jumper block located on the bottom-right corner beside the SCSI header. Refer to Figure 4 for more details.

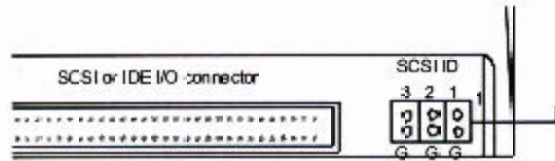


Figure 4 Back view of DataPort I frame.

CRU DataPort IV NARROW SCSI FRAME

The CRU DataPort IV SCSI frame has a 4-pin header on the back of the frame next to the power connector. The 4-pin header is for connecting to an external SCSI ID selector. The BCD cable for this purpose is CRU part number 7350-031-08. Refer to Figure 5 for detailed description.

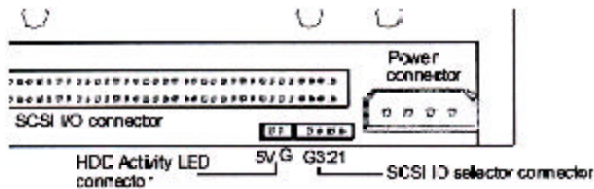


Figure 5 Back view of DataPort IV narrow SCSI frame.

CRU DataPort V AND VI NARROW SCSI FRAME

The CRU DataPort V and VI narrow SCSI frame has a 4-pin header on the back of the frame under the power connector. The 4-pin header is for connecting to an external SCSI ID selector. The BCD cable for this purpose is CRU part number 7350-031-08. Refer to Figure 6 for a detailed description.

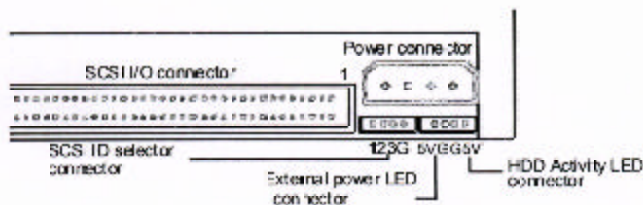


Figure 6 Back view of DataPort V and VI narrow SCSI frame.

CRU DataPort V, V PLUS AND VI ULTRA WIDE SCSI FRAME

CRU DataPort V and VI SCSI Fast/Wide frame has a 5-pin header for connecting the BCD cable (CRU part number 7350-031-09) to the external SCSI ID selector switch. Refer to Figure 7 for a detailed description.

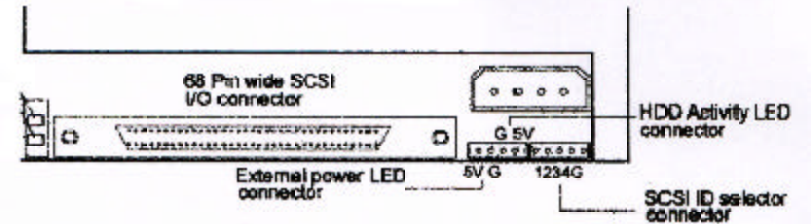


Figure 7 Back view of DataPort V and VI wide SCSI frame.

CRU DataPort VII NARROW SCSI FRAME

The CRU DataPort VII SCSI frame has a 4-pin header on the back of the frame, below the power connector, for connecting to an external SCSI ID selector. The BCD cable for this purpose is CRU part number 7350-031-08. Refer to Figure 8 for detailed description.

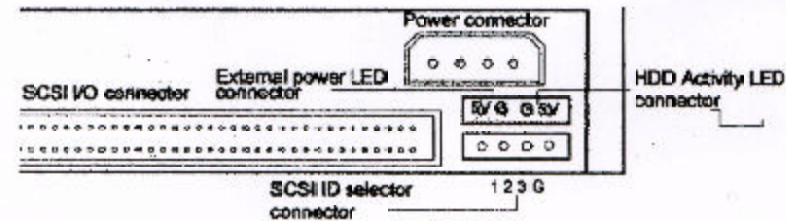


Figure 8 Back view of DataPort VII narrow SCSI frame.

CRU DataPort VII ULTRA WIDE SCSI FRAME

CRU DataPort VII SCSI Fast/Wide frame has a 5-pin header for connecting the BCD cable (CRU part number 7350-031-09) to the external SCSI ID selector switch. Refer to the Figure 9 for detailed description.

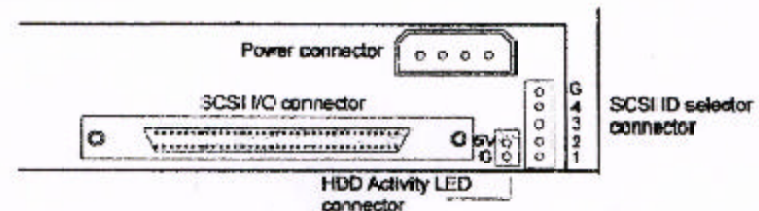


Figure 9 Back view of DataPort VII wide SCSI frame.

OPERATION (DP-I THRU DPVII)

TURN ON THE POWER

The keylock or latch on the CRU DataPort locks the carrier in place and also serves as an "ON/OFF" switch for the power. Turn the keylock or latch 90 degrees clockwise to the "ON" position before turning on the computer. When the computer is turned on, the "Power On" LED (green light emitting diode below the key on the frame assembly) is illuminated, and the system should operate normally.

SCSI ID SELECTOR SWITCH

The CRU DataPort IV, V, VI and VII SCSI carriers are equipped with a dialer type SCSI ID selector switch which allows you to externally name the SCSI drive ID number. The selector switch is located at the back of the carrier. To change the SCSI ID, use a small flat head screwdriver to rotate the arrow head to the desired SCSI ID number. For narrow SCSI drives, you can select an ID number from 0 to 6. For wide SCSI drives, you can select an ID number from 0 to 15 (F).

FAN FAILURE ALARM

The fan failure alarm function is a standard feature on DataPort V Plus, VI and VII, and optional on DataPort V. If the cooling fan should fail, an alarm will beep and the LED on the lower right corner of the DataPort LED display window will flash indicating the fan failure.

IMPORTANT: READ THE FOLLOWING BEFORE REMOVING THE CARRIER.

REMOVE THE CARRIER

Removing the DataPort carrier while the computer is operating is not recommended. If you need to remove the carrier while the computer is running, observe the following precautions:

Wait until the drive activity light has stopped, indicating that no read/write activity is occurring. If your system uses a disk caching program, ensure that all the data has been written to the hard drive. Turn off the drive by turning the key to the "OFF" (vertical) position. The power LED will go off, indicating that the power has been cut. Wait 10 to 15 seconds for the drive to stop spinning, and then remove the cartridge.

CRU is not liable for loss of data. It is the user's responsibility to follow these important procedures to safeguard data.

TROUBLE SHOOTING

NO POWER

Make sure the keylock or latch of the DataPort is turned to the "ON" position and the green power LED light is on. Check the 4-pin DC power connection both inside the carrier and on back of the frame.

DRIVE NOT RECOGNIZED BY COMPUTER

First check all of the cable connections and the jumper configurations. For the SCSI models, check the termination and the SCSI ID number. For the IDE models, check the Master/Slave mode setting on the drive. Ensure the carrier and frame are fully seated and none of the pins were bent during carrier insertion.

PROBLEM WITH SCSI ID NUMBER

Ensure you have assigned each and every SCSI device a unique SCSI identification number. Check the BCD cable connection and the SCSI ID switch.

Make sure all SCSI ID jumpers have been removed from the drive. Some drive manufacturers do ship drives with jumpers.

FAN FAILURE

For Fan Failure contact CRU technical support.

TECHNICAL SUPPORT

Contact your dealer for technical support first. If you still need assistance, then contact the CRU technical support department. You can contact CRU's technical support department by visiting our web site at URL <http://www.cruinc.com> or sending an E-mail message to support@cruinc.com. Technical support is also available by phone at:

(800) 260-9800 during the hours of: 8:00 AM to 5:00 PM, PST
Monday through Friday, or by FAX (360)896-1017.

When you call, please have the following information ready:

The part number of your CRU DataPort(s)

The manufacturer's name and model number of the hard disk drive and computer system you are using

Any error messages that appeared on your screen

The name of the dealer from which you purchased your CRU product(s)

OPERATION (DP-VIII)

SETTING UP THE LCD DISPLAY PANEL

LCD display panel functions

The DataPort VIII has a controller with micro processor to monitor the operating conditions and display the information on the LCD display panel. The user can configure the DataPort VIII with the push buttons located on the front bezel. The available options are:

- Select and display SCSI ID number
- Select and display failure alarm buzzer status
- Record and display MTBF Data (Mean Time Between Failure)
- Display ambient temperature inside the carrier and preset the temperature for which the front fan will operate.
- Display and continually monitor the DC input voltage.

How to set up the LCD panel

Press the "SET" button on the front bezel, to enter set up mode. The setting cycle rotates from SCSI ID, Buzzer alarm, MTBF, Temperature, then Voltage. If there is no action taken for more than 8 seconds, the LCD display panel will return to display mode. Follow the steps below to set up the DataPort VIII LCD display panel for the first time.

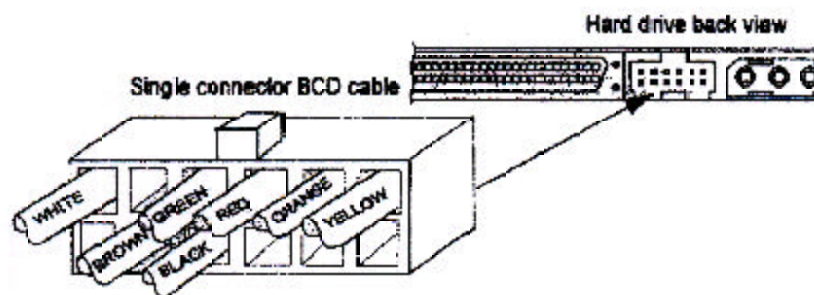


Figure 10 LCD Display panel

1. Set up SCSI ID.

Press the "SET" button to enter set up mode, the "ID" will flash.

Press the "UP" or "DOWN" button to set the desired SCSI ID for the HDD.

• Select the alarm buzzer mode.

Press the "SET" button again, the alarm buzzer icon "U" will flash.

Press the "UP" or "DOWN" button to select the buzzer mode.

Active mode: Pressing any button will mute the alarm when an error occurs. The alarm will beep every minute until the error is corrected.

Quiet mode: Pressing any button will mute the alarm when an error occurs. The alarm will beep only when a new error occurs.

Mute: The alarm will not beep in this mode.

• MTBF record reset.

Press the "SET" button again, the "88 Hr" and "1888 Day" will flash.

Press the "UP" or "DOWN" button to reset to zero. Please note that once the MTBF is cleared the record can not be retrieved.

• Adjust preset temperature.

Press the "SET" button again and the "40.0°C" temperature display will flash.

Press the "UP" or "DOWN" button to adjust the preset temperature value. When the sensor detects that the carrier ambient temperature is equal to or greater than the preset value, the front fan will turn on. The fan will run until the sensor detects the carrier ambient temperature is 2 degrees centigrade lower than preset value.

• Select voltage margin modes.

Press the "SET" button again and the "5V/12V" voltage display will flash.

Press the "UP" or "DOWN" button to select the desired voltage margin mode. There are three available modes:

5% : Display DC voltage only, no alarm.

10% : When the input DC voltage is ten percent higher/lower than standard 5V/12V, the alarm buzzer will beep. Suitable for normal operation.

0% : Display input voltage only, no alarm.

Press the "SET" key again; the setup procedure is completed.

TROUBLE SHOOTING

NO POWER

Make sure the keylock or latch of the DataPort is turned to the "ON" position and the green power LED light is on. Check the 4-pin DC power connection both inside the carrier and on back of the frame.

DRIVE NOT RECOGNIZED BY COMPUTER

First check all of the cable connections and the jumper configurations. For the SCSI models, check the termination and the SCSI ID number. For the IDE models, check the Master/Slave mode setting on the drive. Ensure the carrier and frame are fully seated and none of the pins were bent during carrier insertion.

PROBLEM WITH SCSI ID NUMBER

Ensure you have assigned each and every SCSI device a unique SCSI identification number. Check the BCD cable connection and the SCSI ID switch.

Make sure all SCSI ID jumpers have been removed from the drive. Some drive manufacturers do ship drives with jumpers.

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When you call, please have the following information ready:

The part number of your CRU DataPort(s)

The manufacturer's name and model number of the hard disk drive and computer system you are using

Any error messages that appeared on your screen

The name of the dealer from which you purchased your CRU product(s)

Limited Product Warranty:

Connector Resources Unlimited, Inc. (CRU) warrants their products to be free of significant defects in material and workmanship for a period of either ten (10) years or one (1) year from the original date of purchase, as determined by the "Product Warranty Period" table below. CRU's warranty is nontransferable and is limited to the original purchaser.

Product Warranty Period:

10 Year Warranty - DataPort Series: DataPort I, IV, V, V *plus*, VI, VII and VIII

1 Year Warranty - All other CRU products including but not limited to: DAE-800 RAID Ready Enclosures, 2 & 4 Bay Subsystems, 2, 3, & 4 Bay Backplanes, Twin Fan Cooler, CRU External Enclosures, DataPort IIe and DataPort 320.

Please note: CRU's limited product warranty is not intended to allow customers to upgrade their CRU products to newer versions

Product Remedies:

CRU's entire liability and the original purchaser's exclusive remedy for any breach of warranty, shall be, at CRU's option, either (a) return of the price paid or (b) repair or replacement of the hardware, provided that the hardware is returned to CRU, with a copy of the sales receipt or applicable documentation. Any replacement hardware will be warranted for the remainder of the original warranty period.

These remedies are void if failure of the hardware has resulted from accident, abuse, misapplication or modification. (This will be determined by CRU, Inc.)

Limitation of Liability:

The warranties set forth in this agreement replace all other warranties. CRU expressly disclaims all other warranties, including but not limited to, the implied warranties of merchantability and fitness for a particular purpose and noninfringement of third-party rights with respect to the documentation and hardware. No CRU dealer, agent or employee is authorized to make any modification, extension, or addition to this warranty. In no event will CRU or its suppliers be liable for any costs of procurement of substitute products or services, lost profits, loss of information or data, computer malfunction, or any other special, indirect, consequential, or incidental damages arising in any way out of the sale of, use of, or inability to use any CRU product or service, even if CRU has been advised of the possibility of such damages. In no case shall CRU's liability exceed the actual money paid for the products at issue.

CRU reserves the right to make modifications and additions to this product without notice or taking on additional liability.

Material Return:

Any product being returned to CRU, either by a distributor, dealer or an end user, for repair or replacement must be accompanied by a Return Material Authorization (RMA) number, which must be obtained by contacting CRU's Customer Service Department at 800-260-9800.

Please have these items available when requesting an RMA:
CRU Part Number(s), and your return "Ship To" Address.

IMPORTANT: Returned material must be properly packed to avoid in-transit damage.
Damage to CRU products due to improper packaging will not be covered by this warranty.

Product return packages must be labeled on the outside of the box as follows:

**CRU-DataPort
RMA Dept./RMA #XXXX
1000 SE Tech Center Drive, Suite 160
Vancouver, WA 98683**

CRU will apply its warranty policy and issue RMA numbers based on a review of the specific circumstances of each request. CRU will, at its sole discretion, determine if a product is valid for return to CRU or if another remedy is applicable.

Actual credit or refund for any item returned to CRU will only be applied once the item has been received by CRU and approved to adhere to CRU's Warranty and RMA policies.

RMA product(s) sent to CRU must be received within 30 days of the original RMA issue date. All products on each RMA must be shipped together.

Defective or "DOA" storage product(s) may be returned for new replacement product(s). Prior to returning defective product(s), contact a CRU Technical Support Specialist for problem analysis and replacement approval at 800-260-9800. To return defective product(s), please follow the guidelines below, in addition to the general RMA guidelines described above in the "Material Return" section.

Advance Replacement:

Advance Replacement requests require an Advance Replacement Authorization, pre-approved by a CRU Technical Support Specialist. Advance Replacements also require a credit card to secure the product being replaced. Advance replacements will typically ship within one day of RMA issue date and authorization. CRU will pay outbound freight and insurance only.

Defective Product Return Beyond 30 Days:

CRU products under warranty, but beyond 30 days of the original purchase date, are subject to repair only. To return product(s) after 30 days, please follow the guidelines below, in addition to the general RMA guidelines described above in the "Material Return" section.

Prior to returning defective product(s), contact a CRU Technical Support Specialist for problem analysis and replacement approval at 800-260-9800.

Defective product(s) must be sent freight pre-paid and insured by the requestor.

Repair replacement product(s) will be return shipped from CRU, freight pre-paid and insured by CRU, within three to seven business days of receipt (depending on quantity & repair type). Please allow sufficient shipping time to and from locations; allow three business days for repair. CRU ships all repairs via standard UPS ground unless otherwise agreed to when the RMA is issued.